



## **San Diego City Employees' Retirement System**

## **San Diego County Regional Airport Authority**

## **Actuarial Valuation as of June 30, 2014**

**Produced by Cheiron**

**February 2015**

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## LETTER OF TRANSMITTAL

February 26, 2015

Board of Administration  
 San Diego City Employees' Retirement System  
 401 West A Street, Suite 400  
 San Diego, California 92101

**Re: San Diego County Regional Airport Authority June 30, 2014 Actuarial Valuation**

Dear Members of the Board:

At your request, we performed the June 30, 2014 Actuarial Valuation of the San Diego City Employees' Retirement System (SDCERS). The valuation results with respect to the San Diego County Regional Airport Authority are contained in this valuation report. The table below presents the key results of the valuation for the Airport Authority.

<b>Table I-1</b>			
<b>SDCERS - Airport Authority</b>			
<b>Valuation as of:</b>	<b>June 30, 2014</b>		<b>June 30, 2013</b>
Unfunded Actuarial Liability	\$	5,256,261	\$ 7,583,685
Funding Ratio		95.9%	93.4%
Airport Contribution Rate		12.94%	14.29%
	<b>Fiscal Year 2016</b>		<b>Fiscal Year 2015</b>
Actuarially Determined Contribution			
-if paid at the beginning of the year	\$	3,666,154	\$ 3,822,606
-if paid throughout the year	\$	3,796,727	\$ 3,958,751

- *Unfunded Actuarial Liability (UAL):* The Airport Authority's UAL was expected to increase by \$0.3 million, but it has decreased by \$2.3 million. The decrease was attributable to a net experience gain, driven by investment returns in excess of our 7.25% assumption, as well as greater than expected contributions.
- *Funding Ratio:* The ratio of the System's actuarial value of assets to its actuarial liabilities improved by 2.5%, from 93.4% to 95.9%.
- *Contributions (ADC):* The Airport Authority's actuarially determined contribution (ADC) decreased by \$0.1 million. This decrease was primarily attributable to the investment gain (\$0.3 million) which more than offset the recognition of approximately \$0.1 million of administrative expenses, which represent a 3-year phase in of such expenses.

More details on plan experience for previous plan years and projections into the future can be found in the valuation report. This valuation was prepared using the census data and financial information as of the valuation date, June 30, 2014. Changes in membership and investment experience following that date are not reflected in this report.

In preparing our report, we relied on information (some oral and some written) supplied by SDCERS' staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice Number 23.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Finally, this report was prepared exclusively for the San Diego City Employees' Retirement System for the purpose described herein and for the use by the plan auditor in completing an audit related to the matters herein. This report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,  
Cheiron



Gene Kalwarski, FSA, EA, MAAA  
Principal Consulting Actuary



David Holland, FSA, EA, MAAA  
Consulting Actuary

cc: Alice Alsberghe, ASA

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION I  
BOARD SUMMARY**

The primary purpose of the actuarial valuation is to disclose, as of the valuation date, on the following:

- The financial condition of the SDCERS-Airport Authority Defined Benefit Plan,
- Past and expected trends in the financial condition of SDCERS-Airport Authority,
- The Airport Authority's Actuarially Determined Contribution for Fiscal Year 2016, and
- Information required for the Comprehensive Annual Financial Report (CAFR).

In this Section, we present a summary of the principal valuation results. This summary includes the basis upon which the June 30, 2014 valuation was completed and an examination of the current financial condition of SDCERS-Airport Authority. In addition, we present a review of the key historical trends followed by the projected financial outlook for SDCERS-Airport Authority.

**A. Valuation Basis**

Effective with the June 30, 2014 valuation, GASB disclosures (67 and 68, previously 25 and 27) have been removed from the actuarial valuation report. GASB disclosures are now presented in a stand-alone report, which was issued in October 2014. A number of exhibits have been removed from last year's report Section V, Accounting Statement Information, which has been renamed Comprehensive Annual Financial Report Information.

Prompted by the new standards set forth by GASB 67/68 and the Actuarial Standards Board, in January 2015 the Board voted to account for expected administrative expenses explicitly in the actuarially determined contribution (ADC). The administrative expense component is approximately \$0.1 million for FY 2016, based on a three-year phase in of \$290,000 in expected expenses. The development of this component of the ADC is shown in Table IV-1. All other assumptions and methods are the same as the prior valuation. More details can be found in Appendix B.

Effective January 1, 2013, new Airport Authority employees who are deemed to be "New Members" under the California Public Employees' Pension Reform Act (PEPRA) will be subject to a number of plan provisions, including reduced benefit accrual factors, a cap on pensionable salary, three-year averaging for final salary, and mandatory exclusion of certain items from pensionable salary. PEPRA also requires New Members to pay at least 50% of the normal cost, with more than 50% allowed subject to collective bargaining. There are less significant changes for current employees and retirees. More details on the plan provisions for all tiers can be found in Appendix C.

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**B. Current Financial Condition of SDCERS-Airport Authority**

The following discussion summarizes the key results of the June 30, 2014 valuation and shows how they compare to the results from the June 30, 2013 valuation.

**1. Airport Authority Membership**

Table I-2 shows that total membership in SDCERS-Airport Authority increased by 8.8% from 2013 to 2014. The increase was attributable to the growth in both inactive membership (terminated vested, disabled, retirees and beneficiaries), and active membership, which increased by 4.3%. Expected active member total payroll increased by 6.0%, and the average pay per active member increased by 1.6%.

Note: The payroll figures shown below are the expected amounts for the fiscal year beginning July 1, 2014. The figures shown in Appendix A are the actual pensionable compensation for the fiscal year ending June 30, 2014.

<b>Table I-2</b>				
<b>SDCERS - Airport Authority - Membership Total</b>				
<b>Valuation as of:</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>	<b>% Change</b>	
Active Counts	362	347	4.3%	
Terminated Vested	90	79	13.9%	
Disabled	2	2	0.0%	
Retirees	59	45	31.1%	
Beneficiaries	6	4	50.0%	
Total Airport Authority Members	519	477	8.8%	
Active Member Payroll	\$ 27,955,455	\$ 26,380,323	6.0%	
Average Pay per Active Member	\$ 77,225	\$ 76,024	1.6%	
Benefits in Pay Status	\$ 2,668,801	\$ 2,013,899	32.5%	
Average Benefit	\$ 39,833	\$ 39,488	0.9%	

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**SECTION I  
BOARD SUMMARY**

**2. Airport Authority Assets and Liabilities**

Table I-3 presents a comparison between the June 30, 2014 and June 30, 2013 SDCERS-Airport Authority assets, liabilities, unfunded actuarial liability, and funding ratios.

The key results shown in Table I-3 indicate that due to the total actuarial liability increase of 10.4% and the actuarial value of assets increase of 13.3%, the funding ratio increased from 93.4% as of June 30, 2013 to 95.9% as of June 30, 2014. SDCERS employs a commonly used actuarial smoothing method on the market value that dampens market volatility, so the actuarial value of assets increased less than the market value (20.1%). Had the funding ratio been measured on a market value of assets basis, the ratio would be 102.4% as of June 30, 2014.

The Airport Authority contributed in excess of the FY 2014 ADC in order to attain a 95% funding ratio. Table I-4 shows the impact of the excess contribution on the UAL.

Section II-C provides additional information explaining the development of the actuarial value of assets.

<b>Table I-3</b>					
<b>SDCERS - Airport Authority - Assets &amp; Liabilities</b>					
<b>Entry Age Normal (EAN) Liabilities</b>	<b>June 30, 2014</b>		<b>June 30, 2013</b>		<b>% Change</b>
Actives	\$	87,468,059	\$	84,024,915	4.1%
Terminated Vested		5,275,901		4,396,239	20.0%
Disabled		461,499		456,604	1.1%
Retirees		32,759,997		25,451,563	28.7%
Beneficiaries		<u>1,208,631</u>		<u>870,727</u>	<u>38.8%</u>
Total Actuarial (EAN) Liability	\$	127,174,087	\$	115,200,048	10.4%
Actuarial Value Assets	\$	121,917,825	\$	107,616,363	13.3%
Unfunded Actuarial Liability-Actuarial Value	\$	5,256,261	\$	7,583,685	-30.7%
Funding Ratio-Actuarial Value		95.9%		93.4%	2.5%
Market Value Assets	\$	130,228,000	\$	108,456,000	20.1%
Unfunded Actuarial Liability-Market Value	\$	(3,053,913)	\$	6,744,048	-145.3%
Funding Ratio-Market Value		102.4%		94.1%	8.3%

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**SECTION I  
BOARD SUMMARY**

**3. Components of UAL Change between June 30, 2013 and June 30, 2014**

The unfunded actuarial liability (UAL) for SDCERS-Airport Authority decreased by \$2.3 million, from \$7.6 million to \$5.3 million. Table I-4 below presents the specific components of this change in the UAL.

The three largest components of the change in UAL were the investment experience gain, which decreased the UAL by \$2.8 million, the liability experience loss, which increased the UAL by \$1.2 million, and an employer contribution in excess of the prior year ADC in order to target a 95% funding ratio, which decreased the UAL by \$0.8 million. The primary components of the liability loss were inactive mortality (people living longer than expected) and retirement experience different from expected.

<b>Table I-4 SDCERS - Airport Authority-Change in UAL</b>	
<b>1. UAL at June 30, 2013</b>	<b>\$ 7,583,685</b>
2. Expected change in UAL*	331,146
3. Investment experience gain	
a. Anticipated loss/(gain)	(78,274)
b. Actual loss/(gain)	(2,845,308)
c. Difference (b - a)	(2,767,034)
4. Liability experience loss	1,223,934
5. Administrative expense	N/A
6. Employee contributions paid greater than expected	(287,524)
7. Employer contribution to target 95% funding	(827,945)
8. Increase in negative amortization cost component	N/A
9. Other misc (includes purchased service)	(0)
10. Total change in UAL: sum of 2 through 9	(2,327,423)
<b>11. UAL at June 30, 2014: 1 + 10</b>	<b>\$ 5,256,261</b>

\* Includes projected phase-in of investment gains or losses.



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**SECTION I  
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**4. Airport Authority Contributions**

The Airport Authority's actuarially determined contribution (ADC) for FY 2016 decreased by \$0.1 million, from \$3.8 million to \$3.7 million. The ADC was expected to increase by \$0.1 million to \$3.9 million, assuming continued phase-in of investment experience from prior years, so the ADC of \$3.7 million is \$0.2 million less than expected.

The largest factor impacting the ADC was the investment experience gain, which decreased the ADC by \$0.3 million. Although liabilities were greater than expected, liability experience had very little net impact on the ADC due to the reduction in the normal cost rate from the prior year.

The explicit recognition of administrative expenses added approximately \$0.1 million to the ADC. This administrative expense add-on to the ADC represents one-third of total expected administrative expenses. For FY 2017 there will be two-thirds recognition, and for all fiscal years following, 100% of the expected administrative expenses will be added to the ADC.

Table I-5 below presents the specific components of the change in the ADC. In Section IV we provide more detail on the development of this contribution.

<b>Table I-5</b>	
<b>SDCERS - Airport Authority-Change in ADC</b>	
<b>1. ADC at June 30, 2013</b>	<b>\$ 3,822,606</b>
2. Expected change in ADC*	51,229
3. Investment experience gain	
a. Anticipated increase/(decrease)	(7,183)
b. Actual increase/(decrease)	(261,109)
c. Difference (b - a)	(253,926)
4. Liability experience gain	(859)
5. Administrative expense	96,667
6. Employee contributions paid greater than expected	(26,386)
7. Employer contribution to target 95% funding	(75,979)
8. Increase in negative amortization cost component	45,663
9. Other misc (includes purchased service)	7,139
10. Total change in ADC: sum of 2 through 9	(156,452)
<b>11. ADC at June 30, 2014: 1 + 10</b>	<b>\$ 3,666,154</b>

\* Includes projected phase-in of investment gains or losses.

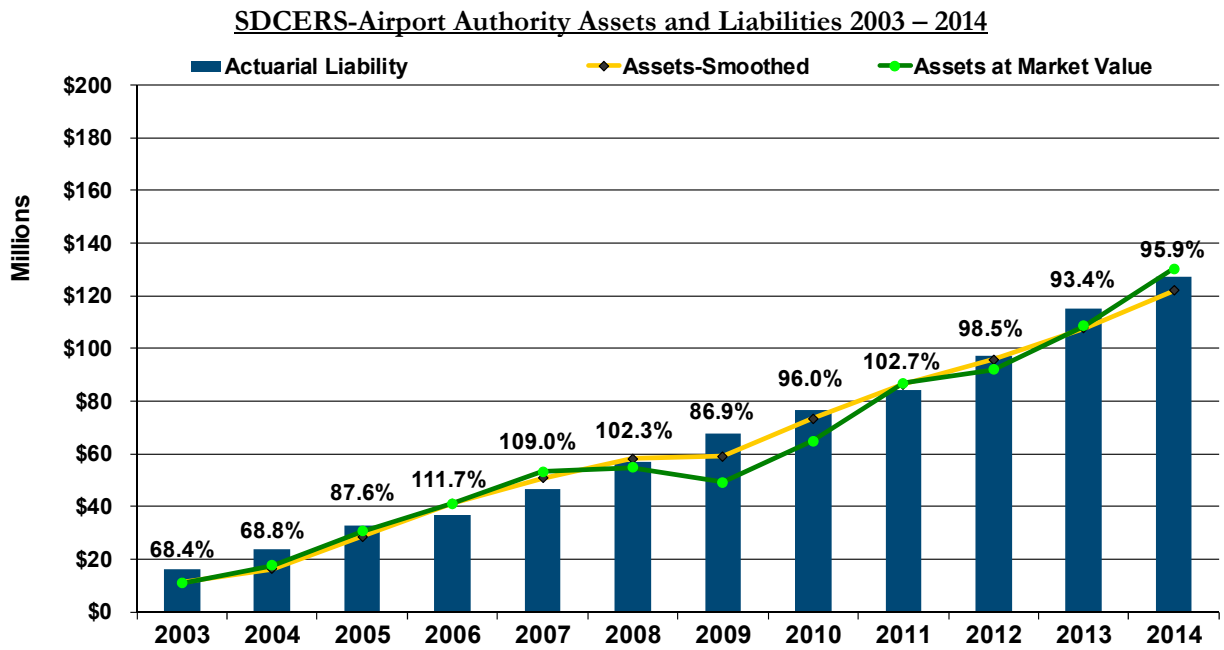
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**SECTION I  
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**C. Historical Trends SDCERS-Airport Authority**

Despite the primary focus given each year on the most recently computed unfunded actuarial liability (UAL), funding ratio, and Airport Authority’s contribution (ADC), it is important to remember that each valuation is merely a snapshot of the long-term progress of a pension plan. It is more important to judge a current year’s valuation results relative to historical trends, and trends expected into the future.

In the chart below, we present the historical trends for both the market value and smoothed assets compared to actuarial liabilities, and SDCERS-Airport Authority funding ratios since 2003.



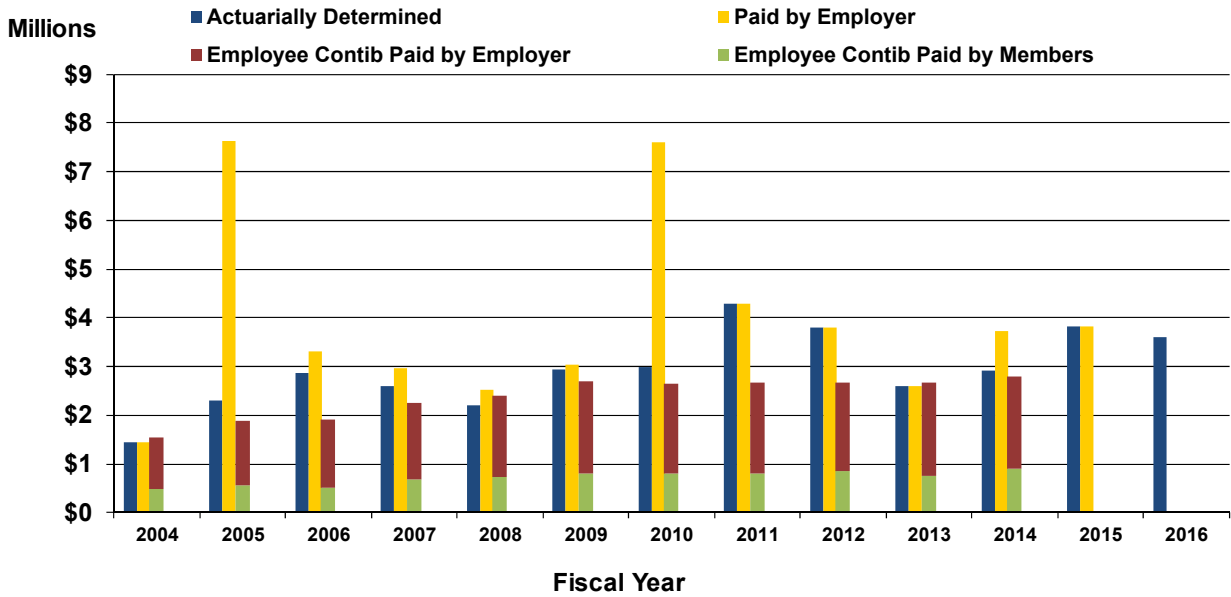
The chart indicates that in 2003 and 2004, the funding ratio was slightly more than 68% of the actuarial value of assets. In 2005 and 2006, the funding ratio significantly increased due to excess contributions and strong investment performance. In 2009 the funding ratio declined significantly, to 86.9%, due to investment losses, but it has been above 90% for the last five years. On a market value of assets basis, the funding ratio is over 100% as of June 30, 2014.

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BOARD SUMMARY**

In the next chart below, we present the historical trends for the SDCERS-Airport Authority contributions: actual contributions made by the Airport Authority and by the Members, and the actuarially computed contributions (previously the GASB ARC, but now referred to as the ADC).

**SDCERS-Airport Authority and Member Contribution Rates FY 2004-2016**



This chart compares the actual contributions made by the Airport Authority to the actuarially determined contributions (ADC) based on the Board’s adopted funding practice of Normal Cost plus amortization of various UAL components, including the requirement beginning in fiscal year 2009 that there be no negative amortization. The FY 2016 ADC also reflects a component for the 3-year phase-in of expected administrative expenses. The chart indicates that the Airport Authority has been consistently paying at or above the ADC since FY 2004, with significant excess contribution amounts in FYs 2005 and 2010.

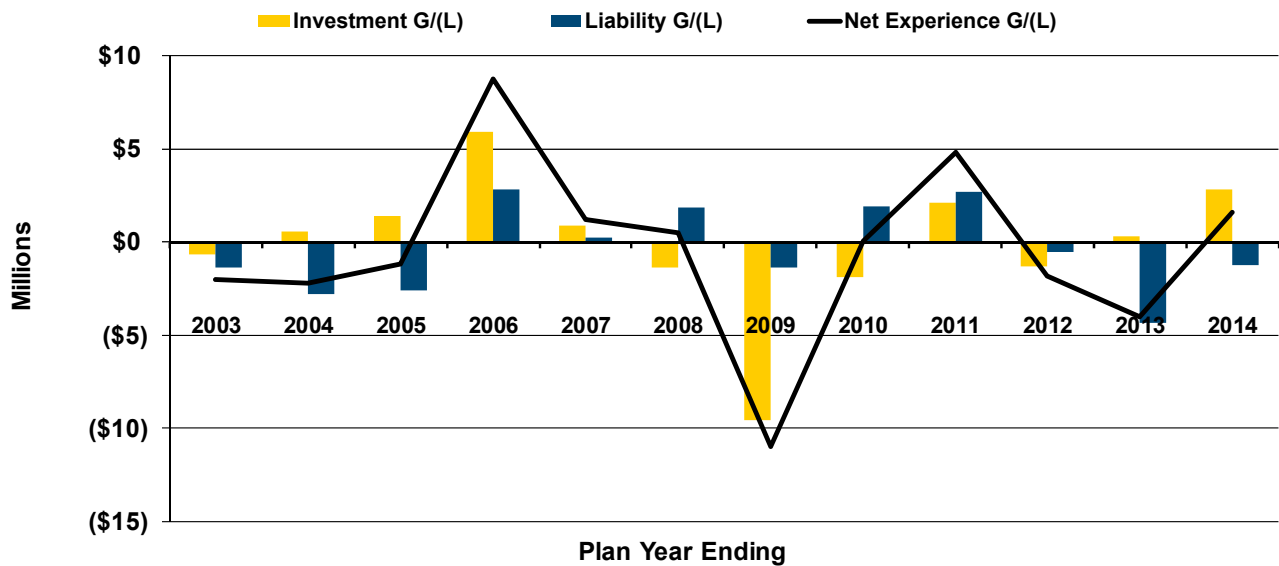
Employee contributions paid by the Airport Authority and paid by the Members are also shown in this chart. A substantial portion of employee contributions are “offset” (paid for) by the Airport Authority.

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The chart below for SDCERS-Airport Authority presents the pattern of annual gains and losses, broken into the investment and liability components. The chart does not include any changes in the SDCERS' assets and liabilities attributable to changes to actuarial methods, procedures or assumptions or plan benefit changes.

**SDCERS-Airport Authority Historical Gain/(Loss) 2003-2014**



The key insights from this chart are:

- The System experienced investment gains (gold bars) in 2004 through 2007, which were more than offset by investment losses of 2008 through 2010.
- The investment loss in 2009 was by far the most significant gain or loss during the period shown.
- Liability gains and losses have fluctuated over the period shown, but there have been losses in each of the past three years. The sources of these gains and losses will be explored in our next formal experience study, scheduled for 2016.

**SDCERS-AIRPORT AUTHORITY  
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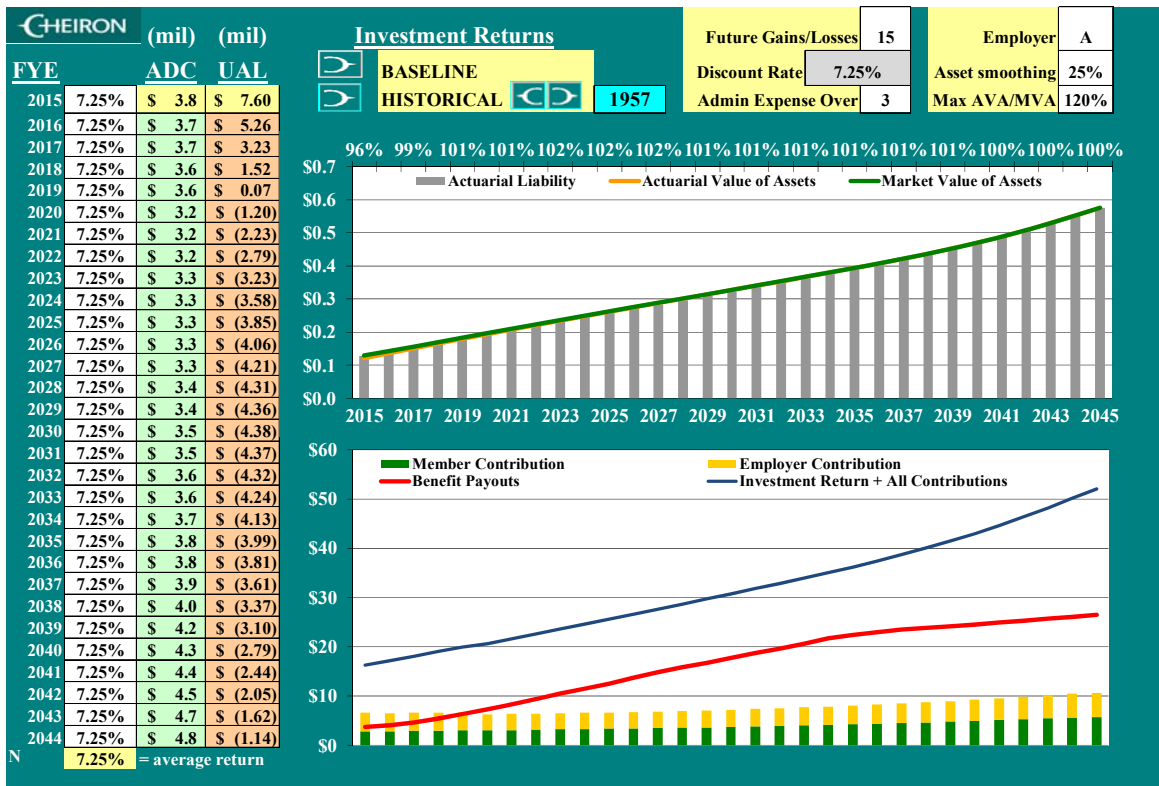
**SECTION I  
BOARD SUMMARY**

**D. Projected Financial Trends**

Our analysis of SDCERS-Airport Authority projected financial trends is a very important part of this valuation. These projections based on the June 30, 2014 valuation results are presented in terms of benefit security (assets over liabilities) and the Airport Authority's expected cost progression.

In the chart that follows, we project the SDCERS-Airport Authority assets and liabilities and the Airport Authority's contributions assuming 7.25% returns each and every year and liability growth exactly as anticipated by the plan assumptions. The upper chart compares the assets (green and yellow lines) and liabilities (gray bars) and the lower chart shows contributions in dollars (employer contributions in yellow bars and member contributions in green bars). The left side of the exhibit shows the returns assumed each year followed by the annual ADC and UAL in dollar amounts.

**SDCERS-Airport Authority Projections FY 2015-2045 (earnings as assumed)**



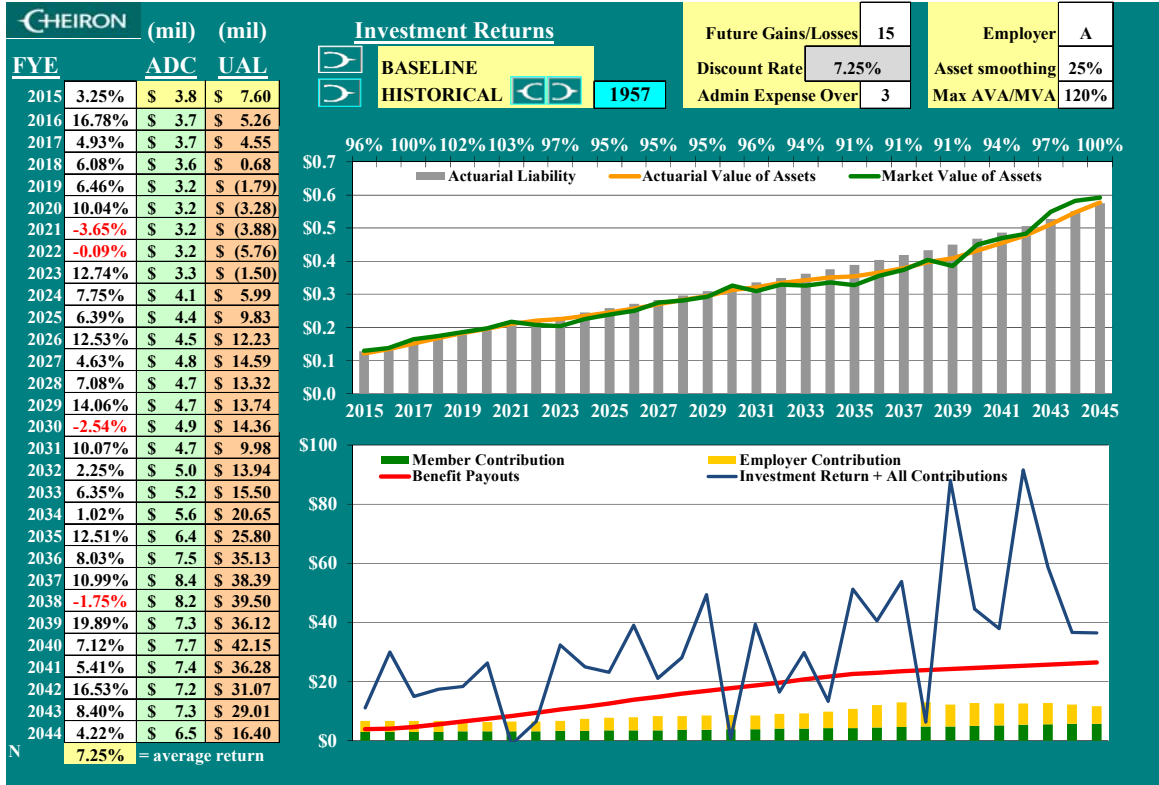
Based on assuming 7.25% earnings each and every year, the Airport Authority's funded status (percentages at the top of the upper graph) is projected to reach 100% by the year 2018. The Airport Authority's ADC is projected to remain relatively stable during the period shown, decreasing slightly over the next few years and then increasing slowly thereafter.

However, it is very important to note that these projections, while valid as baseline projections, **are not going to occur** as experience never conforms exactly to assumptions from year to year. As a result, we present the following additional stress testing projection based on assuming varying returns in the future, which are approximately 7.25% on average.

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**SECTION I  
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**SDCERS-Airport Authority Projections FY 2015-2045 (earnings which vary by year)**



With varying annual earnings that average over the period to approximately 7.25%, one can see the volatility in the funding ratios in the top chart and employer contributions in the bottom chart. Note that this chart reflects an illustrative scenario and is not intended to reflect future expectations.

This last chart demonstrates the risks faced by SDCERS measured in terms of funding ratios and contribution rates. Whether the System is fully funded or poorly funded, subsequent returns can quickly alter the financial position of the plan dramatically. The point being, it is impossible to judge the financial soundness of a System with a single year point measurement. What is more important to consider is the System's level of conservatism in funding the Plan, and the discipline and ability of the plan sponsor to consistently contribute the ADC as determined by the plan actuary.

**SDCERS-AIRPORT AUTHORITY  
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**SECTION II  
ASSETS**

Like other public pension plans, SDCERS uses two different asset measurements that are presented in this section of the report: the market value and the actuarial value of assets. The market value represents, as of the valuation date, the value of the assets if they were liquidated on that date. The actuarial value of assets is a value that smooths annual investment performance over multiple years to reduce the impact of annual investment volatility on employer contribution rates. The actuarial value of assets is used in determining SDCERS' contribution rates for the three participating employer plans.

Each employer receives a separate actuarial valuation report and cost determination. However, the assets of all employer plans are pooled for investment purposes. The apportionment of the assets among the employer plans directly impacts each employer's costs. Therefore, in the interest of ensuring transparency, this section discloses information on the total assets of SDCERS-All Employers. In addition, a brief explanation of how those assets are apportioned to the City of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport Authority is included.

On the following pages, detailed information is presented on SDCERS-All Employers assets, including:

- A. Disclosure of the June 30, 2014 total SDCERS market value of assets, by asset class;
- B. Market value of assets by Plan Sponsor;
- C. Development of the actuarial value of assets; and
- D. Disclosure of the investment performance for the year.

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**SECTION II  
ASSETS**

**A. Disclosure of Market Value of Assets**

The market value of assets represents a “snap-shot” value as of June 30, 2014, the last day of the fiscal year, which provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with swings in the investment markets. Because these fluctuations would cause volatility in employer contributions, an actuarial value of assets is developed. Table II-1 below discloses the market value by asset class of SDCERS–All Employers’ gross assets on June 30, 2014.

Cash	\$ 240,528,000
US Stocks	1,703,423,000
International Stocks	1,626,092,000
Private Equity	380,975,000
Bonds	2,225,269,000
Real Estate	744,441,000
Receivables	63,615,000
Miscellaneous	6,954,000
Accounts Payable	<u>(205,968,000)</u>
<b>Market Value of Assets – June 30, 2014</b>	<b>\$ 6,785,329,000</b>



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**SECTION II  
ASSETS**

**B. Market Value of Assets by Plan Sponsor**

As of July 1, 2007, the City, Unified Port District, and Airport Authority plans were separated into independent, qualified, single employer, governmental defined benefit plans and trusts. The assets of the three separate plans and trusts are pooled in the SDCERS Group Trust, which was established as of July 1, 2007. SDCERS invests and administers the Group Trust as a common investment fund and accounts separately for the proportional interest of each plan and trust that participates in the Group Trust. Cash flow activity for each plan is recorded directly to that plan, with investment activity and other cash flow activity not specific to any one plan being allocated based upon each plan's respective share of the Group Trust's total assets, with time-weighted adjustments for the plan-specific cash flows. Administrative expenses are allocated based on the proportion of participants of a participating trust to the number of total participants of all participating trusts on the first day of the plan year. Table II-2 below discloses the market value and actuarial value of assets by plan.

<b>Table II-2</b>			
<b>Summary of Market and Actuarial Assets for Each Employer Group as of June 30, 2014</b>			
	<u>Market Value</u> Total Net Assets June 30, 2013	<u>Market Value</u> Total Net Assets June 30, 2014	<u>Actuarial Value</u> Total Assets June 30, 2014
City of San Diego	\$ 5,395,158,000	\$ 6,292,855,000	\$ 5,828,593,547
Unified Port District	309,699,000	362,246,000	333,228,645
Airport Authority	<u>108,456,000</u>	<u>130,228,000</u>	<u>121,917,825</u>
<b>Total-SDCERS</b>	<b>\$ 5,813,313,000</b>	<b>\$ 6,785,329,000</b>	<b>\$ 6,283,740,017</b>

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**SECTION II  
ASSETS**

**C. Actuarial Value of Assets**

To determine on-going funding requirements, most pension plans utilize an actuarial value of assets. Unlike the market value of assets, the actuarial value of assets represents an asset value based on averaging or smoothing year-to-year market value returns for purposes of reducing the resulting volatility on contributions.

The actuarial value of assets is equal to 100% of the expected actuarial value of assets as of June 30, 2014 plus 25% of the difference between the current actual market value of assets and the expected actuarial value of assets. (See Appendix B, Section B-2 for further explanation of the asset valuation method). In no event will the actuarial value of assets ever be less than 80% of the market value of assets, nor ever greater than 120% of the market value of assets.

<b>Table II-3 SDCERS - Airport Authority Development of Actuarial Value of Assets at June 30, 2014 Expected Value of Assets Method</b>	
1. Actuarial Value of Assets at June 30, 2013	\$ 107,616,363
2. Amount in (1) with interest at 7.25% to June 30, 2014	115,418,549
3. Employer and Member contributions for the Plan Year ended June 30, 2014	6,690,000
4. Disbursements from Trust excluding investment expenses, June 30, 2013 through June 30, 2014	3,221,000
5. Interest on cash flows to June 30, 2014 at 7.25% per year	<u>260,218</u>
6. Expected Actuarial Value of Assets at June 30, 2014 = (2) + (3) – (4) + (5)	119,147,767
7. Actual Market Value of Assets at June 30, 2014	<u>130,228,000</u>
8. Excess of (7) over (6)	11,080,233
9. Preliminary Actuarial Value of Assets at June 30, 2014 = (6) + 25% of (8)	\$ 121,917,825
10. 80% Minimum Corridor on the Actuarial Value of Assets = 80% of (7)	104,182,400
11. 120% Maximum Corridor on the Actuarial Value of Assets = 120% of (7)	156,273,600
12. Final Actuarial Value of Assets at June 30, 2014 = (9), but no less than (10) and no more than (11)	\$ 121,917,825

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**SECTION II  
ASSETS**

**D. Investment Performance**

The return on the market value of assets, as reported by SDCERS' investment consultant Hewitt Ennis Knupp, was 16.8%. The return in FY 2013 was 13.6%.

On an actuarial (smoothed) value of assets basis, the return for FY 2014 was 10.35%. This return produced for SDCERS-All Employers an overall investment gain of \$166.7 million for the year ending June 30, 2014. (Note: this reported gain is different than the investment gain of \$2.8 million reported in Table I-4 in this report. \$2.8 million is the gain only for SDCERS-Airport Authority).

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**SECTION III  
LIABILITIES**

In this section, we present detailed information on System liabilities for SDCERS-Airport Authority including:

- Disclosure of liabilities at June 30, 2013 and June 30, 2014, and
- Statement of changes in the unfunded actuarial liabilities during the year.

**A. Disclosure**

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- **Present Value of Future Benefits:** Used for measuring all future SDCERS obligations, represents the amount of money needed today to fully pay off all benefits of SDCERS both earned as of the valuation date and those to be earned in the future by current plan participants, under the current plan provisions.
- **Actuarial Liability-Entry Age Normal (EAN):** Used for determining employer contributions. This liability is calculated taking the present value of all future benefits and subtracting the present value of future Member contributions and future employer normal costs as determined under the EAN actuarial funding method. It represents the portion of the present value of future benefits attributed to service prior to the valuation date by the Entry Age Normal method.
- **Present Value of Accrued Benefits:** This liability represents the present value of future benefits payable to all plan participants if the plan were terminated as of the valuation date, and future accruals and contributions stopped.

Table III-1, on the following page, discloses the first two of these liabilities for the current and prior year valuations. Table III-2 breaks down these liabilities by tier, subtracting the actuarial value of assets from the actuarial liability results in a net surplus or an unfunded actuarial liability (UAL). Table III-3 discloses the third of these liabilities, present value of accrued benefits, for the current and prior year valuations.

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III  
LIABILITIES**

<b>Table III-1</b>				
<b>SDCERS - Airport Authority - Total</b>				
Valuation as of:	June 30, 2014		June 30, 2013	
<b>Present Value of Future Benefits</b>				
Actives	\$	128,614,693	\$	124,954,564
Terminated Vested		5,275,901		4,396,239
Disabled		461,499		456,604
Retirees		32,759,997		25,451,563
Beneficiaries		1,208,631		870,727
<b>Total Airport Authority</b>	<b>\$</b>	<b>168,320,720</b>	<b>\$</b>	<b>156,129,697</b>
<b>Actuarial Liability - EAN</b>				
Total Present Value of Future Benefits	\$	168,320,720	\$	156,129,697
Present Value of Future Normal Costs				
Employer Portion		21,939,021		21,970,522
Employee Portion		19,207,612		18,959,127
<b>Actuarial Liability - EAN</b>	<b>\$</b>	<b>127,174,087</b>	<b>\$</b>	<b>115,200,048</b>
Actuarial Value of Assets	\$	121,917,825	\$	107,616,363
<b>Unfunded EAN Actuarial Liability</b>	<b>\$</b>	<b>5,256,261</b>	<b>\$</b>	<b>7,583,685</b>

Table III-2 shows actuarial liability as of June 30, 2014 for General, PEPRA and Executive Members of SDCERS-Airport Authority.

<b>Table III-2</b>								
<b>SDCERS - Airport Authority as of June 30, 2014</b>								
	Total		General		PEPRA		Executives	
<b>Present Value of Future Benefits</b>								
Actives	\$	128,614,692	\$	120,723,288	\$	3,218,597	\$	4,672,807
Terminated Vested		5,275,901		5,274,960		941		-
Disabled		461,499		461,499		-		-
Retirees		32,759,997		23,825,323		-		8,934,674
Beneficiaries		1,208,631		1,208,631		-		-
<b>Total Airport Authority</b>	<b>\$</b>	<b>168,320,720</b>	<b>\$</b>	<b>151,493,701</b>	<b>\$</b>	<b>3,219,538</b>	<b>\$</b>	<b>13,607,481</b>
<b>Actuarial Liability - EAN</b>								
Actives	\$	87,468,059	\$	83,897,100	\$	97,359	\$	3,473,601
Terminated Vested		5,275,901		5,274,960		941		-
Disabled		461,499		461,499		-		-
Retirees		32,759,997		23,825,323		-		8,934,674
Beneficiaries		1,208,631		1,208,631		-		-
<b>Total Airport Authority</b>	<b>\$</b>	<b>127,174,087</b>	<b>\$</b>	<b>114,667,513</b>	<b>\$</b>	<b>98,300</b>	<b>\$</b>	<b>12,408,274</b>

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III  
LIABILITIES**

Table III-3 shows the present value of accrued benefits as of June 30, 2014 for all Members of SDCERS-Airport Authority.

<b>Table III-3</b>				
<b>SDCERS - Airport Authority - Present Value of Accrued Benefits</b>				
	<b>Valuation as of:</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>	<b>% Change</b>
<b>Present Value of Accrued Benefits</b>				
1. Present Value of Benefits Accrued and Vested to Date				
a. Members Currently Receiving Payments	\$	34,430,127	\$ 26,778,894	28.6%
b. Vested Terminated and Inactive Members		5,275,901	4,396,239	20.0%
c. Active Members		<u>58,901,946</u>	<u>56,199,889</u>	<u>4.8%</u>
d. Total PVAB	\$	98,607,973	\$ 87,375,021	12.9%
2. Assets at Market Value	\$	130,228,000	\$ 108,456,000	20.1%
3. Unfunded Present Value of Accrued Benefits, But Not Less Than Zero	\$	-	\$ -	
4. Ratio of Assets to Value of Benefits (2)/(1)(d)		132.07%	124.13%	8.0%

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III  
LIABILITIES**

**B. Changes in Unfunded Actuarial Liabilities**

The UAL of any retirement plan is expected to change at each subsequent valuation for a variety of reasons. In each valuation, we report on those elements of change in the UAL that have particular significance or could potentially affect the long-term financial outlook of a retirement plan. Below we present key changes in liabilities since the last valuation.

<b>Table III-4</b>		
<b>Development of 2014 Experience Gain/(Loss) SDCERS - Airport Authority</b>		
<b>(In Thousands)</b>		
1. Unfunded Actuarial Liability at June 30, 2013	\$	7,583.7
2. Beginning of year Unfunded Actuarial Liability payment		(130.9)
3. Interest accrued ((1+2) x 7.5%)		<u>540.3</u>
4. Expected Unfunded Actuarial Liability at June 30, 2014 (1+2+3)		7,993.1
5. Actual Unfunded Liability at June 30, 2014		5,256.3
6. Difference: (4 - 5)		2,736.8
7. Portion of difference (6) due to actuarial assumption or method changes		-
8. Portion of difference (6) due to plan changes		-
9. Portion of difference (6) due to contributions greater than expected *		1,115.5
10. Portion of difference (6) due to net experience Gain/(Loss)		1,621.4
a) portion of (10) due to investment experience	\$	2,845.3
b) portion of (10) due to liability experience	\$	(1,223.9)
c) portion of (10) due to service purchases	\$	-
<b>Elements of Liability Gain/(Loss)</b>		
1. G/(L) due to demographic and payroll experience		(1,223.9)
2. Other Gain/(Loss)		<u>-</u>
3. Total Estimated Liability Gain/(Loss): sum 1 and 2	<b>\$</b>	<b>(1,223.9)</b>

\* Includes additional employer contribution to target 95% funding.

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION III  
LIABILITIES**

Table III-5 shows the history of past experience gains and losses.

<b>Table III-5</b>			
<b>Experience Gain/(Loss) - Historical SDCERS - Airport Authority</b>			
<b>Valuation Date</b>	<b>Gain/(Loss)</b>	<b>Beginning-of-Year Actuarial Liabilities</b>	<b>Gain/(Loss) % of Liability</b>
6/30/2003	\$ (2,013,702)	\$ 11,526,293	(17.5%)
6/30/2004	(2,204,850)	16,278,613	(13.5)
6/30/2005	(1,207,448)	23,578,460	(5.1)
6/30/2006	8,732,864	32,602,898	26.8
6/30/2007	1,176,387	36,905,216	3.2
6/30/2008	492,707	46,636,555	1.1
6/30/2009	(10,976,099)	56,807,663	(19.3)
6/30/2010	27,790	67,870,945	0.0
6/30/2011	4,808,814	76,447,473	6.3
6/30/2012	(1,801,741)	84,042,425	(2.1)
6/30/2013	(3,923,241)	97,224,854	(4.0)
6/30/2014	1,621,374	115,200,048	1.4



## SECTION IV CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to achieve and maintain an appropriate funded status of a plan. Typically, the actuarial process will use an actuarial funding method that attempts to create a pattern of contributions that is both stable and predictable.

The actuarial funding methodology employed is the Entry Age Normal (EAN) actuarial funding method. Under the funding method, there are three components to the total contribution: the normal cost, an amortization payment on the unfunded actuarial liability, and the expected administrative expenses. The normal cost for an individual employee is the ratio of their present value of future benefits to present value of future salaries at entry age, multiplied by their valuation salary. The gross normal cost rate for each sub-group is determined by dividing the sum of the individual normal costs by the total valuation salary for that sub-group. The gross normal cost rate is then reduced by the average employee contribution rate to determine the employer normal cost rate. Finally, the employer normal cost rate for each sub-group is multiplied by that group's projected FY 2016 payroll to determine the normal cost component of the FY 2016 ADC.

The EAN actuarial liability is the Plan's total present value of future benefits minus the total present value of future normal costs. The difference between the EAN actuarial liability and the actuarial value of assets is the unfunded actuarial liability. The UAL for FY 2016 is to be amortized over several different periods. Table IV-2 shows the outstanding balance, the FY 2016 payment and the remaining amortization period for each of these components. If necessary, there is an additional UAL cost component to ensure that there is no negative amortization in any year.

In January 2015 the Board voted to account for expected administrative expenses explicitly in the actuarially determined contribution (ADC). The administrative expense component is approximately \$0.1 million for FY 2016, based on a three-year phase-in of \$290,000 in expected expenses. For FY 2017 there will be two-thirds recognition, and for all fiscal years following, 100% of the expected administrative expenses will be added to the ADC.

Table IV-1 on the following page shows how the Airport Authority's contribution rate for SDCERS for FY 2016 is developed.

SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014

**SECTION IV  
CONTRIBUTIONS**

**Table IV-1  
SDCERS - Airport Authority  
Development of the Airport's Contribution as of June 30, 2014, For (FY 2016)  
(dollars in millions)**

	WEIGHTED			
	TOTAL AIRPORT	General	PEPRA	Executives
1. Total Normal Cost Rate as of June 30, 2014	<b>22.02%</b>	22.83%	14.59%	22.48%
2. Member Contribution Rate as of June 30, 2014	<b><u>10.09%</u></b>	<u>10.33%</u>	<u>7.74%</u>	<u>10.70%</u>
3. Employer Normal Cost Rate as of June 30, 2014 (1-2)	<b>11.93%</b>	12.50%	6.85%	11.78%
4. Actuarial Liability	\$ 127.2	\$ 114.7	\$ 0.1	\$ 12.4
5. Actuarial Assets	\$ 121.9	\$ 109.9	\$ 0.1	\$ 11.9
6. Total Unfunded Actuarial Liability (UAL) (4-5)*	\$ 5.3	\$ 4.7	\$ 0.0	\$ 0.5
7. Preliminary FY16 UAL amortization*	\$ 0.2	\$ 0.2	\$ 0.0	\$ 0.0
8. <u>Negative Amortization Test for FY16</u>				
a. Total UAL on 6/30/14 less FY15 UAL payment	\$ 4.8	\$ 4.3	\$ 0.0	\$ 0.5
b. Interest on 8a. To 6/30/15	\$ 0.3	\$ 0.3	\$ 0.0	\$ 0.0
c. Preliminary FY16 UAL amortization (line 7)	\$ 0.2	\$ 0.2	\$ 0.0	\$ 0.0
d. Negative interest (8b - 8c, not less than zero)	0.1	0.1	0.0	0.0
9. Total FY16 UAL payment on 7/01/15 (8c + 8d)	\$ 0.3	\$ 0.3	\$ 0.0	\$ 0.0
10. Total FY16 UAL payment throughout year	\$ 0.4	\$ 0.3	\$ 0.0	\$ 0.0
11. Total Expected Payroll for FY16	\$ 29.4	\$ 22.7	\$ 5.8	\$ 0.9
12. FY16 Normal Cost paid throughout the year	\$ 3.3	\$ 2.8	\$ 0.4	\$ 0.1
13. FY16 Normal Cost paid at start of year	\$ 3.2	\$ 2.7	\$ 0.4	\$ 0.1
14. Administrative Expenses paid throughout the year**	\$ 0.1	\$ 0.1	\$ 0.0	\$ 0.0
15. Determination of FY16 ADC %				
a. Employer Normal Cost Rate (12 divided by 11)	<b>11.36%</b>	12.50%	6.85%	11.78%
b. UAL Rate (line 10 divided by line 11)	<b>1.23%</b>	1.44%	0.00%	4.14%
c. Admin Expense Rate (line 14 divided by line 11)	<b><u>0.34%</u></b>	<u>0.38%</u>	<u>0.19%</u>	<u>0.43%</u>
d. Total employer ADC % (15a + 15b + 15c)	<b>12.94%</b>	14.31%	7.04%	16.35%
16. Determination of FY16 ADC dollars				
a. FY16 ADC if paid throughout year	\$ 3.8	\$ 3.2	\$ 0.4	\$ 0.1
b. FY16 ADC if paid at beginning of year	\$ 3.7	\$ 3.1	\$ 0.4	\$ 0.1

\* See Table IV-2 for components of these amounts.

\*\* Administrative expenses are to be phased in over 3 years.

Note: Numbers may not add due to rounding.

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION IV  
CONTRIBUTIONS**

Table IV-2 shows information on each layer of the June 30, 2014 UAL.

<b>Table IV-2</b>								
<b>SDCERS - Airport Authority</b>								
<b>Schedule of Amortization Bases as of July 1, 2014</b>								
<b>Used in Development of the Airport Authority's Contribution for FY 2016</b>								
<b>Type of Base</b>	<b>Date Established</b>	<b>Initial Amount</b>	<b>Initial Amortization Years</b>	<b>July 1, 2014 Outstanding Balance</b>	<b>Outstanding Balance for FY 2016 (BOY)*</b>	<b>Remaining Amortization Years</b>	<b>FY 2016 Amortization Amount</b>	
1. June 30, 2007 UAL	7/1/2007	\$ (4,175,587)	14	\$ (2,223,163)	\$ (2,045,721)	7	\$ (326,150)	
2. Assumption Change	7/1/2008	2,808,340	30	3,274,015	3,298,901	24	204,654	
3. Experience Gain	7/1/2008	(1,356,123)	15	(1,274,513)	(1,206,014)	9	(154,975)	
4. Experience Loss	7/1/2009	9,892,984	15	9,671,975	9,243,524	10	1,088,064	
5. Experience Gain	7/1/2010	(5,002,725)	15	(5,046,358)	(4,862,438)	11	(529,533)	
6. Experience Gain**	7/1/2010	(1,750,000)	15	(1,765,263)	(1,700,926)	11	(185,236)	
7. Experience Gain	7/1/2011	(4,235,009)	15	(4,377,519)	(4,246,978)	12	(431,414)	
8. Assumption Change	7/1/2011	(574,045)	30	(637,053)	(644,545)	27	(37,270)	
9. Experience Loss	7/1/2012	2,533,950	15	2,674,679	2,610,062	13	249,010	
10. Method Change	7/1/2012	1,443,033	30	1,575,167	1,595,548	28	90,363	
11. Experience Loss	7/1/2013	4,086,907	15	4,383,208	4,298,751	14	387,425	
12. Assumption Change	7/1/2013	1,620,447	30	1,737,930	1,762,318	29	97,870	
13. Experience Gain	7/1/2014	(2,736,843)	15	<u>(2,736,843)</u>	<u>(2,935,264)</u>	15	<u>(251,155)</u>	
<b>TOTAL</b>				<b>\$ 5,256,261</b>	<b>\$ 5,167,218</b>		<b>\$ 201,653</b>	

\* July 1, 2014 outstanding balance adjusted to the FY2016 beginning of year (BOY), July 1, 2015.

\*\* Reduction in UAL from anticipated impact of PSC correction as of the June 30, 2010 valuation.

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION V  
COMPREHENSIVE ANNUAL FINANCIAL REPORT INFORMATION**

Effective with the June 30, 2014 valuation, GASB disclosures (67 and 68, previously 25 and 27) have been removed from the actuarial valuation report. GASB disclosures are now presented in a stand-alone report, which was issued in October 2014. A number of exhibits have been removed from this section as a result.

Tables V-1 and V-2 are exhibits required for the System's Comprehensive Annual Financial Report (CAFR). The Government Finance Officers Association (GFOA) recommends showing at least 6 years of experience in each of these exhibits in the CAFR. Table V-1 presents an analysis of financial experience for the valuation year, and Table V-2 presents the Solvency Test which shows the portion of actuarial liability covered by assets.

<b>Table V-1 SDCERS - Airport Authority ANALYSIS OF FINANCIAL EXPERIENCE Gain and Loss in Actuarial Liability During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience</b>	
<b>Type of Activity</b>	<i>Gain (or Loss) for Year ending June 30, 2014</i>
Investment Income	\$ 2,845,308
Combined Liability Experience	<u>(1,223,934)</u>
Gain (or Loss) During Year from Financial Experience	\$ 1,621,374
Non-Recurring Gain (or Loss) Items (e.g., Contributions, Assumption Changes)	<u>1,115,469</u>
Composite Gain (or Loss) During Year	\$ 2,736,843

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**SECTION V  
COMPREHENSIVE ANNUAL FINANCIAL REPORT INFORMATION**

**Table V-2  
SDCERS - Airport Authority  
SOLVENCY TEST  
Actuarial Liabilities For  
(\$ in thousands)**

Valuation Date June 30,	(A)	(B)	(C)	Reported Assets <sup>1</sup>	Portion of Actuarial Liabilities Covered by Reported Assets		
	Active Member Contributions	Retirees And Beneficiaries	Remaining Active Members' Liabilities		(A)	(B)	(C)
2014	\$ 12,949	\$ 34,430	\$ 79,795	\$ 121,918	100%	100%	93.41%
2013 <sup>7</sup>	13,384	26,779	75,037	107,616	100	100	89.89
2012	11,371	22,438	63,416	95,793	100	100	97.74
2011 <sup>6</sup>	11,132	16,133	56,778	86,309	100	100	103.99
2010	10,611	11,832	54,004	73,401	100	100	94.36
2009	9,120	9,924	48,827	58,981	100	100	81.79
2008 <sup>5</sup>	7,335	6,341	43,131	58,096	100	100	102.99
2007 <sup>4</sup>	6,681	4,288	35,668	50,812	100	100	111.71
2006 <sup>3</sup>	5,402	2,783	28,720	41,222	100	100	115.03
2005	4,255	2,713	25,635	28,551	100	100	84.19
2004	2,935 <sup>2</sup>	795	19,848	16,225	100	100	62.95

<sup>1</sup> Actuarial Value of Assets.

<sup>2</sup> Estimated.

<sup>3</sup> Reflects contingent liabilities (13<sup>th</sup> check), DROP reserves, and IRC Section 415 limits.

<sup>4</sup> The actuarial liability on June 30, 2007 and after is based on the entry age actuarial funding method. All prior years are based on the projected unit credit actuarial funding method.

<sup>5</sup> Reflects revised actuarial and economic assumptions.

<sup>6</sup> Reflects revised actuarial and economic assumptions.

<sup>7</sup> Reflects revised actuarial and economic assumptions.

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**APPENDIX A  
MEMBERSHIP INFORMATION**

Table A-1 Reconciliation of Member Data Airport Authority								
	Active	Terminated Vested	Terminated Non-Vested	Disabled	Retired	Beneficiaries	DROP	Totals
<b>Participants as of 7/1/2013</b>	<b>347</b>	<b>32</b>	<b>47</b>	<b>2</b>	<b>35</b>	<b>4</b>	<b>10</b>	<b>477</b>
New Entrants	46							46
Returned to Work	0							0
Vested Terminations	(7)	7						0
Non-Vested Terminations	(6)		6					0
Retirements	(5)	(1)			12		(6)	0
DROP	(8)						8	0
Disabilities				0				0
New Continuants						2		2
New Dissolutions *				0	0		0	0
Benefits Ceased **	(1)	0	0	0	0	0	0	(1)
Lump Sum Cashout	(4)	(1)	(2)					(7)
Transferred Out	0	0						0
Miscellaneous Adjustments	0	0	2	0	0	0	0	2
<b>Participants as of 7/1/2014</b>	<b>362</b>	<b>37</b>	<b>53</b>	<b>2</b>	<b>47</b>	<b>6</b>	<b>12</b>	<b>519</b>

\* Includes participants who may have previously had a frozen benefit and retired from a different plan.

\*\* Includes deaths and benefits that were terminated or suspended.

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**APPENDIX A  
MEMBERSHIP INFORMATION**

<b>Table A-2 SDCERS - Airport Authority Active Member Data</b>			
	<b>June 30, 2014</b>	<b>June 30, 2013</b>	<b>% Change</b>
Count	362	347	4.3%
Average Current Age	47.6	48.1	-1.0%
Average Service	9.2	9.9	-7.1%
Average Pensionable Earnings	\$ 74,866	\$ 74,533	0.4%
Annual Pensionable Earnings	\$ 27,101,398	\$ 25,863,062	4.8%
Average Valuation Compensation <sup>1</sup>	\$ 74,866	\$ 74,447	0.6%
Annual Valuation Compensation <sup>1</sup>	\$ 27,101,398	\$ 25,833,258	4.9%
Service Without Permissive Service Purchased	8.8	9.3	-5.4%
Members with Paid Purchased Service	39	44	-11.4%
Members with Any Purchased Service	41	48	-14.6%
Amount of Paid Purchased Service	135	160	-15.9%
Amount of Total Purchased Service	148	180	-18.0%

<sup>1</sup>The definition of valuation compensation differs from the definition of pensionable earnings due to IRS 401(a).

<b>Table A-3 SDCERS - Airport Authority Non-Active Participant Data</b>						
	<b>Count</b>			<b>Average Age</b>		
	<b>June 30, 2014</b>	<b>June 30, 2013</b>	<b>%Change</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>	<b>%Change</b>
Retired	59	45	31.1%	64.9	65.2	-0.5%
Disabled	2	2	0.0%	58.6	57.6	1.7%
Beneficiaries	6	4	50.0%	62.2	63.0	-1.3%
Payee Total	67	51	31.4%	64.5	64.8	-0.5%
DROP Participants	12	10	20.0%	62.1	62.9	-1.3%
Deferred Vested <sup>1</sup>	90	79	13.9%	45.6	46.7	-2.4%
Vested < 5 yrs svc	53	47	12.8%			

<sup>1</sup> Includes all participants having a contribution balance still on account with SDCERS.

<b>Table A-4 SDCERS - Airport Authority Non-Active Participant Data</b>						
	<b>Total Annual Benefit</b>			<b>Average Annual Benefit</b>		
	<b>June 30, 2014</b>	<b>June 30, 2013</b>	<b>%Change</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>	<b>%Change</b>
Retired	\$ 2,536,340	\$ 1,909,883	32.8%	\$ 42,989	\$ 42,442	1.3%
Disabled	35,427	34,380	3.0%	17,713	17,190	3.0%
Beneficiaries	97,034	69,636	39.3%	16,172	17,409	-7.1%
Payee Total	\$ 2,668,801	\$ 2,013,899	32.5%	\$ 39,833	\$ 39,488	0.9%
DROP Participants	\$ 700,261	\$ 649,670	7.8%	\$ 58,355	\$ 64,967	-10.2%
Deferred Vested <sup>1</sup>	\$ 1,719,513	\$ 1,414,252	21.6%	\$ 19,106	\$ 17,902	6.7%

<sup>1</sup> Includes all participants having a contribution balance still on account with SDCERS. Annual benefit for deferred vested participants is the total contribution balance on account as of valuation date.

**SDCERS-AIRPORT AUTHORITY  
ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**APPENDIX A  
MEMBERSHIP INFORMATION**

**Table A-5  
SDCERS - Airport Authority  
Distribution of Active Members (Excludes DROP Participants) as of June 30, 2014  
Total Airport Authority**

Age	Years of Service										Total Count	Average Salary
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	1	-	-	-	-	-	-	-	-	-	1	\$ 38,077
25 to 29	5	12	1	-	-	-	-	-	-	-	18	46,527
30 to 34	9	14	6	1	-	-	-	-	-	-	30	51,899
35 to 39	6	7	13	12	1	-	-	-	-	-	39	70,110
40 to 44	7	13	16	19	3	1	-	-	-	-	59	79,665
45 to 49	1	15	9	13	6	7	1	-	-	-	52	77,640
50 to 54	4	3	25	15	10	7	4	-	-	-	68	80,088
55 to 59	1	6	14	14	7	7	3	1	-	-	53	81,231
60 to 64	-	5	14	6	5	-	1	-	1	-	32	78,286
65 to 69	-	1	6	-	1	-	-	-	-	-	8	76,458
70 and up	-	-	-	2	-	-	-	-	-	-	2	164,464
<b>Tot Count</b>	34	76	104	82	33	22	9	1	1	-	362	
<b>Avg. Salary</b>	\$ 58,458	\$ 62,544	\$ 77,466	\$ 80,727	\$ 87,094	\$ 83,827	\$ 90,328	\$ 75,150	\$ 78,067	\$ -		\$ 74,866



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**APPENDIX A  
MEMBERSHIP INFORMATION**

**Table A-6  
SDCERS - Airport Authority  
Retirees (Includes DROP Participants), Disabled, and Beneficiaries Tabulated by Attained Age/Benefit Effective Date  
Total Airport Authority**

Plan Year	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
pre-2004	-	-	-	-	-	1	1	-	-	-	2
2005	-	1	-	-	2	1	-	-	-	-	4
2006	-	-	-	1	-	-	-	-	-	-	1
2007	-	-	-	-	1	4	-	-	-	-	5
2008	-	-	-	3	1	1	-	-	-	-	5
2009	-	-	-	2	2	-	-	-	-	-	4
2010	-	-	-	2	4	-	-	-	-	-	6
2011	-	-	2	2	6	2	-	-	-	-	12
2012	-	-	1	5	2	-	-	-	-	-	8
2013	-	-	3	3	1	-	-	-	-	-	7
2014	-	-	5	6	2	-	-	-	-	-	13
<b>Total</b>	-	1	11	24	21	9	1	-	-	-	67

Surviving spouses benefit effective date no longer based on participant's original date of retirement.

<b>Average Age at Retirement/Disability</b>	60.5
<b>Average Current Age</b>	64.5
<b>Average Annual Pension</b>	\$ 39,833

**APPENDIX A  
MEMBERSHIP INFORMATION**

### **Data Assumptions and Practices**

In preparing our data, we relied on information (some oral and some written) supplied by the SDCERS staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. Our methodology for obtaining the data used for the valuation is based upon the following assumptions and practices:

- Service for Actives and Inactives was calculated using Benefit Service. An adjusted date of hire is retroactively calculated from the valuation date. Purchased Service that has been paid for is included in the Benefit Service field. Purchased Service that has been applied for, but not paid as of the valuation date will be assumed to be paid in full and this service will be reflected in the projected benefit.
- Valuation Salary for FY 2015 for APA active participants was determined using the “SDCRAA FY15\_AnnualComp11182014” supplemental file.
- New hires with a “Date of Entry” after 6/30/2013 had their “Current Annual Pensionable Salary” annualized based on accrued service to date.
- Actives with an “Employment Type” of Half Time or  $\frac{3}{4}$  Time had their “Current Annual Pensionable Salary” annualized to a full year.
- “Contrib Rate” was updated to reflect the new contribution rates for active employees. If the “Contrib Rate” was not provided, the prior year contribution for the participant was used to update and reflect the new rate.
- For accounts having duplicate records in the Actives and Inactives by Social Security Number the information from the latest payroll date is regarded as most up-to-date. The other record is treated as out of date and invalid.
- For duplicate records (based on SSN and Benefit Type) in the payee file, records having the same plan and same benefit type but different benefit amounts, we have added those benefit amounts together.
- Records on the provided “Member” file are considered to be Active if they have no “Date of Death,” no “Date of Separation,” do not have a retiree record and they received pay in the last pay period (Last Pay Period = 26 or 27) of the current FY.
- Records on the “Member” file are considered to be Inactive if they do not have a “Date of Death,” do not have a retiree record and either have a “Date of Separation” or have a “Last Pay Period” earlier than the last pay period of the current FY.
- For continuing Inactives, the supplemental file “Average Comp sent to Cheiron 11142014” was used for the “Average Compensation.” If a participant was not provided in the file, last year’s “Average Compensation” was used.
- For new Inactives, “Average Compensation” will be the maximum of the annualized pay over the prior year and the last four fiscal years’ pensionable salaries.

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**APPENDIX A  
MEMBERSHIP INFORMATION**

- We assume that any active member found in the inactive data last year has returned to work and should be valued as Active.
- Records on the “Payee” file are considered in pay status if their benefit is not suspended.
- Pension Benefit for retirees for each plan was calculated by summing “Monthly Pension,” “Monthly Annuity,” “COLA Annuity,” “Surviving Spouse Annuity,” and “COLA Pension” and subtracting “DRO Reduction Amt.” The “DRO Reduction Amt” field is mainly for Qualified Domestic Relation Order purposes. The “13th Check Supplement” field is added as an annual benefit and the “Corbett Supplement” is annualized for new retirees in the City only. It is assumed the payment is annual for Members already in pay status prior to this valuation.
- Members retiring since the prior valuation date and not having a “13<sup>th</sup> Check Supplement Amount” will have their projected “13<sup>th</sup> Check Supplement Amount” calculated assuming \$30 multiplied by the “13th Check Supplement Years.”
- Payees’ “Cola Pension” and “Star Cola Pension” do not include a COLA as of 7/1/2014. These COLA increases were provided in the supplemental file “07012014 COLAs.”
- Members may retire and receive benefits from multiple Plans (e.g., a City Police Officer could have also worked for the Airport Authority); we will value each Member’s blended benefit individually. This will result in the counts being slightly higher than actual counts due to people having more than one benefit payable from multiple plans.
- We assume any retiree found in last year’s “Payee” file and not in this year’s file has died without a beneficiary and should be removed from the valuation data.
- We assume all deceased retirees with payments continuing to a beneficiary have already been accounted for in the “Payee” file.
- We exclude any payee receiving \$0.00 from a blended benefit plan.
- The Final 415 Regulations were used to calculate the present value of Member benefits over the Internal Revenue Service Code 415 Benefit Limits.

**APPENDIX B  
ACTUARIAL ASSUMPTIONS AND METHODS**

**A. Actuarial Assumptions**

**1. Investment Return Rate**

SDCERS' assets are assumed to earn 7.25% net of investment expenses.

**2. Inflation Rate**

An inflation assumption of 3.3% compounded annually is used for projecting the total annual payroll growth for amortization of the UAL.

**3. Administrative Expense Assumption**

Administrative expenses are assumed to be \$290,000 for FY 2016, increasing by 2.50% annually. Of this amount, one-third, or approximately \$0.1 million, has been included in the FY 2016 ADC. For FY 2017 there will be two-thirds recognition, and for all fiscal years following, 100% of the expected administrative expenses will be added to the ADC.

**4. Interest Credited to Member Contributions**

7.25%, compounded annually.

**5. Salary Increase Rate**

Inflation component: 3.3% (Freezes had been assumed for FYs 2013 and 2014).

The additional merit component:

<b>Table B-1</b>	
<b>Years of Service at Valuation Date</b>	<b>General</b>
0	5.00%
1	4.00%
2	3.00%
3	2.00%
4	1.00%
5+	0.50%

**5. Cost-of-Living Increase in Benefits**

Assumed to be 2.0% per annum, compounded.

**6. COL Annuity Benefit**

For active Members, the COL annuity benefit is valued by adding to the liabilities one-sixth of accumulated member contribution accounts and using a load factor of 2.0% for future member contributions (for PEPRA Participants, the load factor is developed so that the normal cost rate is equal to one-sixth of the employee contribution rate).

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ACTUARIAL ASSUMPTIONS AND METHODS**

**7. Member Refunds**

All or part of the employee contribution rate is subject to potential “offset” by the employer. That “offset” and the related accumulated interest are not to be refunded to employees at termination. However, such offsets are not directly reflected in either the employee contributions or related refund calculations.

**8. Rates of Termination**

<b>Table B-2</b>	
<b>SDCERS - Airport Authority</b>	
<b>Rates of Termination</b>	
<b>Service</b>	<b>General</b>
0	11.00%
1	10.00
2	9.00
3	8.00
4	7.00
5	5.50
6	4.50
7	4.50
8	4.00
9	4.00
10	3.00
11	3.00
12	3.00
13	3.00
14	3.00
15	3.00
16	3.00
17	3.00
18	3.00
19	3.00
20	3.00
21	3.00
22+	3.00

10% of terminating employees, with 5+ years of service at termination, are assumed to subsequently work for a reciprocal employer and receive 3.8% pay increases per year.

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ACTUARIAL VALUATION AS OF JUNE 30, 2014**

**APPENDIX B  
ACTUARIAL ASSUMPTIONS AND METHODS**

**9. Rates of Disability**

<b>Table B-3</b>	
<b>SDCERS - Airport Authority</b>	
<b>Rates of Disability at Selected Ages</b>	
<b>Age</b>	<b>General</b>
20	0.02%
25	0.03
30	0.04
35	0.06
40	0.08
45	0.12
50	0.20
55	0.35
60	0.45

60% of the disabilities are assumed to be industrial disability retirements. Non-industrial disability retirement is subject to a service requirement.

**10. Rates of Mortality for Active Lives**

To reflect improvements in mortality since the date of the tables, the mortality tables have been modified to reflect actual experience through June 30, 2010 and include a projection to 2013.

All active members follow the RP2000 Combined Healthy table (male and female) projected to 2013.

<b>Table B-4</b>		
<b>SDCERS - Airport Authority</b>		
<b>Rates of Mortality for Active Lives at Selected Ages</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
20	0.03%	0.02%
25	0.03	0.02
30	0.04	0.02
35	0.07	0.04
40	0.10	0.06
45	0.13	0.09
50	0.17	0.13
55	0.28	0.25
60	0.55	0.47
65	1.06	0.91
70	1.83	1.57

All active Member deaths are assumed to not be duty-related.

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**ACTUARIAL ASSUMPTIONS AND METHODS**

**11. Rates of Mortality for Retired Healthy Lives**

To reflect improvements in mortality since the date of the tables, the mortality tables have been modified to reflect actual experience through June 30, 2010. No modifications have been made to project future mortality improvements. In the next experience study we will examine the mortality experience and consider the projection of future improvement.

All retired healthy participants use the RP2000 Combined Healthy table (male and female).

<b>Age</b>	<b>Male</b>	<b>Female</b>
40	0.11%	0.07%
45	0.15	0.11
50	0.21	0.17
55	0.36	0.27
60	0.67	0.51
65	1.27	0.97
70	2.22	1.67
75	3.78	2.81
80	6.44	4.59
85	11.08	7.74
90	18.34	13.17

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**ACTUARIAL ASSUMPTIONS AND METHODS**

**12. Rates of Mortality for Retired Disabled Lives**

To reflect improvements in mortality since the date of the tables, the mortality tables have been modified to reflect actual experience through June 30, 2010. No modifications have been made to project future mortality improvements. In the next experience study we will examine the mortality experience and consider the projection of future improvement.

The mortality tables used are variations of the CALPERS Disability Tables (male and female):

<b>Table B-6</b>		
<b>SDCERS - Airport Authority</b>		
<b>Rates of Mortality for Disabled Lives at Selected Ages</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
40	1.45%	0.67%
45	1.65	0.99
50	1.63	1.25
55	1.86	1.58
60	2.19	1.63
65	2.99	1.97
70	3.76	3.02
75	5.42	3.92
80	7.90	5.56
85	12.48	9.58



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ACTUARIAL ASSUMPTIONS AND METHODS**

**13. The Rates of Retirement**

Rates of Retirement are shown in the table below. Retirement rates include both service retirements and entry into DROP.

<b>Table B-7</b>		
<b>SDCERS - Airport Authority</b>		
<b>Rates of Retirement by Service Years</b>		
<b>Service</b>	<b>Prior to age 62</b>	<b>Age 62 or greater</b>
5-9	--	9.0%
10	--	33.3
11	--	33.3
12	--	33.3
13	--	33.3
14	--	33.3
15	--	33.3
16	--	33.3
17	--	33.3
18	--	33.3
19	--	33.3
20	30.0	40.5
21	15.0	33.3
22	17.5	35.1
23	20.0	36.9
24	22.5	38.7
25	25.0	40.5
26	27.5	42.3
27	30.0	44.1
28	32.5	45.9
29	35.0	47.7
30	37.5	49.5
31	40.0	51.3
32	40.0	53.1
33	40.0	54.9
34	40.0	56.7
35+	100.0	100.0

For vested deferred members, we assume that retirement will occur provided they have at least five years of service on the later of attained age or the earlier of age 62 or age 55 and 20+ years of service.

If the inactive participant is not vested, the liability is the contributions with interest.

**APPENDIX B  
ACTUARIAL ASSUMPTIONS AND METHODS**

**14. Family Composite Assumptions**

80% of men and 55% of women were assumed married at retirement. A female spouse is assumed to be three-years younger than her male spouse.

**15. Member Contributions for Spousal Continuance**

All active Members contribute towards a 50% survivor continuance. However, Members who are unmarried at retirement may either be refunded that specific part of their contributions, or they may leave such contributions on account and receive an incremental benefit that is the actuarial equivalent of such contributions.

**16. Deferred Member Actuarial Accrued Benefit**

The benefit was estimated based on information provided by SDCERS staff. The data used to value the estimated deferred benefit were date of birth, date of hire, date of termination, and last pay. Based on the data provided, service credit, highest average salary, and deferred retirement age were estimated. The estimates were used to compute the retirement benefit, upon which the liabilities are based. For those participants without sufficient data or service, accumulated participant contribution balances, with interest, were used as the actuarial accrued liability.

**17. DROP Account Balances**

For DROP participants still working, the liability for the account balances in the asset information received from SDCERS staff was adjusted to assume average commencement in 2½ years and an interest crediting rate of 1.8%. Thereafter, it was assumed the account balance would be converted to an annuity at an interest rate of 3.6% over an average period of 10 years. The 10-year period was selected to average among the available DROP payment elections, including a lump sum, life expectancy, and 20 years. The liability for pre-2006 DROP account balances still left on account was valued assuming they would be paid out until age 70½, with an interest crediting rate of 1.8%. The liability for the remaining account balances was adjusted based on the DROP annuity rate in effect at the Member's benefit effective date.

These adjustments are applied to the DROP account balance values provided in the financial statements. The account balance liability is allocated to each individual Tier (e.g., General) based on the total amount of the DROP account balances for that Tier in the valuation data.

**18. Other**

The contribution requirements and benefit values of a plan are calculated by applying actuarial assumptions to the benefit provisions and Member information furnished, using the actuarial funding methods described in the following section.

Actual experience of SDCERS will not coincide exactly with assumed experiences, regardless of the choice of the assumptions, the skill of the actuary, or the precision of the many calculations made. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed contribution rate. From time to time it becomes appropriate to modify

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**APPENDIX B  
ACTUARIAL ASSUMPTIONS AND METHODS**

one or more of the assumptions to reflect experience trends, but not random year-to-year fluctuations.

**19. Changes Since Last Valuation**

The DROP interest crediting and annuity rates used to value the liability for account balances were increased from 1.2% to 1.8% and from 3.3% to 3.6%, respectively, to reflect the Board's adoption of these rates at its November 2014 meeting.

In January 2015, the Board voted to account for expected administrative expenses explicitly in the actuarially determined contribution (ADC), with a three-year phase in.

**APPENDIX B**  
**ACTUARIAL ASSUMPTIONS AND METHODS**

**B. Actuarial Methods**

**1. Actuarial Funding Method**

The Entry Age Normal funding method was used for active employees, whereby the normal cost rate is computed as the average level annual percent of pay required to fund the retirement benefits for all Members between their dates of hire and assumed dates of retirement. The EAN actuarial liability is the difference between the plan's total present value of future benefits and the present value of future normal costs, calculated for each sub-group (e.g., General). The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets, and is allocated to each sub-group based on its liability.

The unfunded actuarial liability is amortized by annual payments. The payments are determined so that they will be a level percentage of pay, assuming payroll increases 3.3% per year. The UAL is amortized over different closed periods depending on the source of the loss. The entire UAL as of June 30, 2007 is amortized over 14 years. Subsequent gains and losses are amortized over 15 years, changes in assumptions over 30 years, and changes in benefits over 20 years (or period over which benefit changes are paid, if shorter). Funding surplus, if any, is amortized over 30 years. Finally, if necessary, there is an additional UAL cost component to ensure that there is no negative amortization in any year.

**2. Asset Valuation Method**

For the purposes of determining the Airport Authority's actuarially determined contribution to SDCERS, we use a smoothed actuarial value of assets. The asset smoothing method dampens the volatility in asset values that could occur because of the fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process. Assets are assumed to be used exclusively for the use of retirement benefits and expenses.

The actuarial value of assets each year is equal to 100% of the *expected actuarial value of assets*<sup>1</sup> plus 25% of the difference between the current market value of assets and the expected actuarial value of assets. In no event will the actuarial value of assets ever be less than 80% of the market value of assets nor greater than 120% of the market value of assets.

**3. Changes Since Last Valuation**

None.

<sup>1</sup> The expected actuarial value of assets is equal to the prior year's actuarial value of assets increased with actual contributions made, decreased with actual disbursements made, all items (prior assets, contributions and disbursements) further adjusted with expected investment returns for the year.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

The Airport Authority was spun off from the Unified Port District effective January 1, 2003. Existing liabilities and assets were transferred to the new plan based on an interim valuation dated December 31, 2002. The Airport Authority Plan is created pursuant to San Diego City Charter section 149, which became effective on April 24, 2002, and San Diego Municipal Code Chapter 2, Article 4, section 24.0912 and Division 18. This Plan is effective on January 1, 2003, and nothing in this Plan should be constructed to affect any rights or benefits Airport Authority employees have earned in this Retirement System as of that date.

**1. Membership Requirement**

Membership is mandatory upon first day of employment for all full-time Airport employees (§ 0103).\*

Classic Participant means any Member who is not a PEPRA Participant (§ 0102).

PEPRA Participant means any Member hired on or after January 1, 2013 who has never been a member of a public retirement system or who had a break in service of more than six months before their Airport hire date (§ 0102).

**2. Monthly Salary Base for Benefits**

*Classic Participants:*

Highest contiguous 26 bi-weekly pay periods divided by 12 (§ 0102), subject to a 10% increase for employees who were both a UPD employee on December 31, 2002 and became an Airport employee on or after January 1, 2003 and were employed by the UPD and contributing to SDCERS on January 1, 2002, if the Member elects such increase in lieu of an increased benefit formula.

*PEPRA Participants:*

Highest 36 consecutive months divided by 36 (§ 0102). Base Salary cannot exceed 100% of the Social Security contribution and benefit base, indexed to the CPI-U.

**3. Service Retirement**

**Eligibility**

*Classic Participants:*

Age 62 with five years of service (excludes five-year permissible purchased service), or age 55 with 20 years of service (§ 0300).

*PEPRA Participants:*

Age 52 with five years of service (§ 0300).

**Benefit**

*Classic Participants:*

Member choice of: (1) formula in place on December 31, 2001 with 10% increase in Final Average Compensation, (2) "Andrecht" formula effective as of January 1, 2002, or (3) "2.5% at 55" multiplier with a benefit cap of 90% of Final Average Compensation effective April 1, 2004 for Non-Executive General

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\* All "§ " references are to the Airport Authority Plan Document.

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**APPENDIX C  
SUMMARY OF PLAN PROVISIONS**

Members. Executive Members receive “3% at 55” multiplier without an increase in Final Average Compensation.

*PEPRA Participants:*

1% per year of service at age 52, increasing to 2.5% at age 67, not to exceed 90% of Final Compensation (§ 0300).

For all employees, there is an additional benefit equal to the annuitized Member COL Annuity contributions at retirement date. In all cases, there is an integration feature which provides for 2/3 of the formula multiplier on the first \$400 of Final Average Compensation.

**Member Service Retirement Accrual Factors**

<b>Table C-1</b>					
<b>SDCERS - Airport Authority</b>					
<b>Member Service Retirement Accrual Factors</b>					
<b>Age</b>	<b>Pre 12/31/2001</b>	<b>Andrecht</b>	<b>Post 4/1/2004</b>	<b>Executive</b>	<b>Post 1/1/2013</b>
52	--	--	--	--	1.00%
53	--	--	--	--	1.10%
54	--	--	--	--	1.20%
55	2.00%	2.25%	2.50%	3.00%	1.30%
56	2.00%	2.25%	2.60%	3.00%	1.40%
57	2.00%	2.25%	2.70%	3.00%	1.50%
58	2.00%	2.25%	2.80%	3.00%	1.60%
59	2.08%	2.25%	2.90%	3.00%	1.70%
60	2.16%	2.30%	3.00%	3.00%	1.80%
61	2.24%	2.35%	3.00%	3.00%	1.90%
62	2.31%	2.40%	3.00%	3.00%	2.00%
63	2.39%	2.45%	3.00%	3.00%	2.10%
64	2.47%	2.50%	3.00%	3.00%	2.20%
65	2.55%	2.55%	3.00%	3.00%	2.30%
66	2.55%	2.55%	3.00%	3.00%	2.40%
67+	2.55%	2.55%	3.00%	3.00%	2.50%

<b>Table C-2</b>	
<b>SDCERS - Airport Authority</b>	
<b>For Vested Members who terminated--</b>	<b>--the accrual factors are--</b>
December 31, 2002 - Present	Pre 12/31/2001 factors above with 10% increase in Final Average Compensation, Andrecht, Post 4/1/2004 or Executive (if applicable)

**Maximum Benefit**

Effective April 1, 2004, there is a 90% benefit cap, as a percentage of pay, for non-Executive Members who choose post-4/1/2004 factors. This cap does not apply to the annuitized COL Annuity benefit.

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

**Unmodified Form of Payment**

Monthly payments continued for the life of the Member, with 50% continuance to the eligible spouse, domestic partner, or dependent child under 21 years of age upon Member's death. If there is no eligible spouse, the Member may receive either a lump sum payment equal to the accumulated surviving spouse contributions or an actuarially equivalent annuity.

**Note:** Airport Authority employees participate in Social Security.

**4. Non-Industrial Disability**

**Eligibility**

Ten years of service. (§ 0502)

**Benefit**

Greater of 1.5% per year of service multiplied by final compensation, one-third of final compensation, or the earned service retirement benefit, if eligible. (§ 0503)

**5. Industrial Disability**

**Eligibility**

No age or service requirement (§ 0500).

**Benefit**

Greater of one-third of final compensation, or the earned service retirement benefit, if eligible. (§ 0501)

**6. Non-Industrial Death Before Eligible to Retire**

Refund of employee contributions with interest plus one month's salary for each completed year of service to a maximum of six months salary. (§ 0701)

**7. Non-Industrial Death After Eligible to Retire for Service**

50% of earned benefit payable to eligible surviving spouse, domestic partner, or dependent child under 21 years of age. (§ 0703)

**8. Industrial Death**

50% of the final average compensation preceding death, payable to eligible surviving spouse, domestic partner or dependent child under 21 years of age. (§ 0704)

**APPENDIX C**  
**SUMMARY OF PLAN PROVISIONS**

**9. Death After Retirement**

Continuance to surviving beneficiary depending on benefit selection made at retirement.

\$2,000 payable in lump sum to the beneficiary or the estate of the retiree. (§ 0600, 0708)

**10. Withdrawal Benefits**

**Less than five years of service**

Refund of accumulated employee contributions with interest, or may keep deposits with SDCERS and earn additional interest, and use service with a reciprocal system to establish eligibility for earned benefits upon concurrent retirement from reciprocal system. (§0205, 0401)

**Five or more years of service**

If contributions left on deposit, entitled to earned benefits, commencing any time after eligible to retire. (§0205)

**11. Post-retirement Cost-of-Living Benefit**

Based on changes in Consumer Price Index, to a maximum of 2% per year. (§ 1301)

**12. COL Annuity**

Actuarial equivalent of accumulated contributions in cost-of-living annuity account at time of retirement. (§ 0300)



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**APPENDIX C  
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**13. Member Contributions**

Vary by age at time of entrance into the system (§ 0200). While a significant portion of these contributions may be “offset,” such offsets are not directly reflected in either the employee contributions or related refund calculations. Rates include cost of providing spouse’s continuance, cost of providing COL Annuity, and cost of funding final one-year average in lieu of final three-year average (§ 0102, 0200, 0201).

<b>Table C-3</b>				
<b>SDCERS - Airport Authority</b>				
<b>Employee Contribution Rates<sup>1</sup></b>				
<b>Entry Age</b>	<b>Hired Before January 1, 2013</b>		<b>Hired On or After January 1, 2013</b>	
	<b>Integrated Members<sup>2</sup></b>		<b>Integrated Members<sup>2</sup></b>	
	<b>First \$400/Mo.</b>	<b>Over \$400/Mo.</b>	<b>First \$400/Mo.</b>	<b>Over \$400/Mo.</b>
20	5.52%	8.28%	2.75%	4.25%
21	5.59	8.38	3.00	4.50
22	5.66	8.49	3.00	4.50
23	5.73	8.60	3.25	4.75
24	5.80	8.70	3.25	5.00
25	5.89	8.83	3.50	5.00
26	5.97	8.95	3.50	5.25
27	6.04	9.06	3.75	5.50
28	6.12	9.18	3.75	5.75
29	6.20	9.30	4.00	5.75
30	6.28	9.42	4.00	6.00
31	6.37	9.55	4.25	6.25
32	6.45	9.67	4.25	6.50
33	6.53	9.79	4.50	6.75
34	6.61	9.91	4.50	6.75
35	6.70	10.05	4.75	7.00
36	6.79	10.18	4.75	7.25
37	6.88	10.32	5.00	7.50
38	6.97	10.45	5.25	7.75
39	7.05	10.58	5.50	8.25
40	7.15	10.72	5.50	8.50
41	7.24	10.86	5.75	8.75
42	7.33	10.99	6.00	9.00
43	7.42	11.13	6.00	9.25
44	7.52	11.28	6.25	9.50
45	7.61	11.42	6.50	9.75
46	7.71	11.56	6.50	10.00
47	7.81	11.71	6.75	10.25
48	7.91	11.86	7.00	10.50
49	8.01	12.01	7.00	10.75
50	8.10	12.15	7.25	11.00
51	8.21	12.32	7.50	11.25
52	8.31	12.47	7.75	11.50
53	8.42	12.63	7.75	11.75
54	8.53	12.79	8.00	12.00
55	8.63	12.95	8.00	12.00
56	8.74	13.11	8.00	12.00
57	8.87	13.31	8.00	12.00

<sup>1</sup> Rate = Normal Cost + Cost of Living Rate

<sup>2</sup> Non-Integrated Members will follow the “Over \$400/month” rate

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Interest: 8.00%  
Salary: 5.00%  
Mortality: 83 Group Annuity Mortality (GAM) male  
(Males set back 2 years, Females set back 8 years)

Changes to the salary scale and mortality table effective with the June 30, 1994 valuation were applied to the then existing Member rates.

**14. Internal Revenue Code Compliance**

Benefits provided by SDCERS' Trust Fund are subject to the limitations set forth in Section 415 in accordance with the "grandfather" election in Section 415(b)(10) of the Internal Revenue Code.

As of the June 30, 2006 valuation, active participants' benefit payments were limited by Section 415 of the Internal Revenue Code. As of the June 30, 2007 valuation, all benefit payments were limited by Section 415 of the Internal Revenue Code.

**15. Deferred Retirement Option Plan**

Effective April 1, 1997, a deferred retirement option plan (DROP) was created and offered to Members as an alternative method of benefit accrual (§1200). Members eligible for service retirement are eligible to participate in DROP, but only those hired before October 3, 2006 may enter the program (§1201).

A participant in DROP may leave DROP at any time before the end of his or her designated DROP participation period by voluntarily leaving Airport Authority employment (§1202). The maximum DROP participation period is 60 months (§1201).

A DROP participation account is a nominal account established with the Retirement System, which is credited with the following amounts (§1203):

- The Member's monthly service retirement allowance, credited monthly, calculated at the date of DROP entry and increased each year by a cost-of-living adjustment.
- The Member's supplemental 13<sup>th</sup> check benefit, if applicable, credited annually.
- 3.05% of base compensation, payable by the Airport Authority and credited bi-weekly.
- 3.05% of base compensation, payable by the Member and credited bi-weekly.
- Interest credited to the DROP account, at the rate determined by the Board.

When a Member leaves DROP and Airport Authority employment, they begin to collect their monthly service retirement allowance, their supplemental 13<sup>th</sup> check benefit (if applicable), and the amounts credited to their DROP participation account, payable as a single lump sum distribution, as a 240-month annuity with equal payments, or any other form approved by the Board and subject to applicable provisions of the Internal Revenue Code (§1206).

DROP is not intended to jeopardize the tax-qualified status of the retirement system under the rules and regulations of the Internal Revenue Service. Benefits provided under this division are subject to the limitations of Section 415 of the Internal Revenue Code relating to the amount of benefits that can be paid (§1207).

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**16. Blended Benefit with Participating Agencies**

Members may retire and receive benefits from multiple Plans (e.g., an Airport Authority employee could have also worked for the Unified Port District).

**17. Changes Since Last Valuation**

The California Public Employees' Pension Reform Act (PEPRA) was effective January 1, 2013 and has a significant impact on the plan provisions for most employees hired on or after that date. PEPRA participants first appeared in the census data with this June 30, 2014 valuation.

**Note:** The summary of major plan provisions is designed to outline principal plan benefits. If the SDCERS staff should find the plan summary not in accordance with the actual provisions, the actuary should immediately be alerted so the proper provisions are valued.

**APPENDIX D  
GLOSSARY OF TERMS**

**1. Actuarial Liability**

The Actuarial Liability is the difference between the present value of all future system benefits and the actuarial value of future normal costs. This is also referred to by some actuaries as “accrued liability” or “actuarial accrued liability.”

**2. Actuarial Assumptions**

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

**3. Accrued Service**

Service credited under the system which was rendered before the date of the actuarial valuation.

**4. Actuarial Equivalent**

A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

**5. Actuarial Cost Method**

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”

**6. Actuarial Gain/(Loss)**

The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

**7. Actuarial Present Value**

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

**8. Actuarially Determined Contribution (ADC)**

Contribution determined each year based on the SDCERS Board’s adopted funding policy. The term also exists in GASB 67 and 68 as a contribution determined by the actuary in accordance with Actuarial Standards of Practice, but no further guidance is provided.

**9. Amortization**

Paying off an interest-discounted amount with periodic payments of interest and principal—as opposed to paying off with lump sum payment.

**APPENDIX D  
GLOSSARY OF TERMS**

**10. Normal Cost**

The actuarial present value of retirement system benefits allocated to the current year by the actuarial funding method.

**11. Set Back/Set Forward**

Set back is a period of years that a standard published table (i.e., mortality) is referenced backwards in age. For instance, if the set back period is two years and the participant's age is currently 40, then the table value for age 38 is used from the standard published table. It is the opposite for set forward. A system would use set backs or set forwards to compensate for mortality experience in their work force.

**12. Unfunded Actuarial Liability (UAL)**

The difference between actuarial liability and the actuarial value of assets.

Most retirement systems have unfunded actuarial liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability, and the trend in its amount (after due allowance for devaluation of the dollar).